



## WHAT DATA COMMUNICATIONS CAN DO FOR YOU





## THE NEED FOR DATA COMMUNICATIONS

Our expanding economy has placed new demands on business and industry. More and more management is finding it important to achieve better control of all phases of their operations. And the most successful companies are relying on the opportunities offered by data communications—opportunities to make better use of business information.

In fact, it is predicted that within 10 years more than half the nation's companies doing more than \$500,000 annual gross will need data communication services.

Through an integrated data communications system utilizing Teletype equipment, you'll be able to centralize your general accounting operations; streamline billing, ordering, and distribution procedures; cut inventory costs; and provide faster management information services to help keep you ahead of competition.

Teletype terminal equipment is the most widely used means for preparing business data for transmission, as well as for transmitting and receiving it. Many firms use Teletype sets to speed data from where it originates to where it must go to prove of value.

### HOW TO RECOGNIZE YOUR NEED FOR DATA COMMUNICATIONS

There are many business problems that can be solved more efficiently and with less cost by the use of integrated data communications. Among these are the following:

- Obtaining adequate information necessary for management decisions.
- Eliminating costly errors caused by duplicated paperwork.
- Speeding distribution with fast-moving paperwork.
- Reducing customer complaints.
- Communicating with computer centers.

If you recognize any of these within your office, then an integrated data communications system can help you. To provide you with a clearer understanding of how effective Teletype data communications is, the remainder of this brochure describes what other companies have accomplished.

This information is transmitted to the warehouses by Teletype sets. The entire cycle takes only one week, minimizing chances of stock depletion at any center.

### **HERE'S HOW TO SERVICE CUSTOMERS BETTER AND REDUCE COMPLAINTS**

Extreme competition among companies has placed new importance on customer service. In some cases, customer service is the deciding factor in who gets the order. Yet, rapid expansion of many companies has strained their capacities to process orders, meet production schedules and satisfy customer expectations. Old methods and equipment have had to give way to new procedures. Computers and data communications equipment have become a must—not a luxury.

Teletype equipment plays an important role as the communications link in data processing systems. The stroke of a key is all that separates your accounting, production, shipping and other departments. Teletype sets will quickly forward the same accurate information to all these departments at the same time within the same building or even another city.

Thus, you can handle more communications faster to meet the requirements of your expanding company, as well as satisfying your customers. The following examples show how others have used data communications to answer demands of customer service.

#### **NEW CUSTOMER SERVICE**

A large fertilizer supplier has established the first national railroad car tracing system for its own customers. Using Teletype ASR (automatic send-receive) sets, some 25 major railroads transmit to the supplier's home office the location of every car load shipment of fertilizer made by their lines.

The information is fed into a computer which provides a report telling where all carload shipments made by the firm were located within the last 24 hours. This information is then relayed to customers

through the supplier's sales offices across the country. As a result, a customer need never start a tracer to find out where cars are or when they will arrive. A quick call to the local office of the supplier will give him all the facts he needs.

#### **INSTANT SECURITIES TRANSACTIONS**

Even a few wasted minutes can often mean the difference between profit and loss in a securities transaction. That's why a large investment banking firm is now using Teletype machines to link its home office computer with both its branch offices and the stock exchange floors. As a result, its customers are assured of immediate and direct processing of their securities transactions. In addition, this firm is able to make instantaneous inquiries into massive files on securities and customer accounts, as well as checking the margin buying power of each account.

#### **BANK IMPROVES CUSTOMER SERVICES**

Many banks are relying on data communications equipment to improve the efficiency of their customer services. For example, a bank in a midwestern city has installed a Teletype ASR set to put it in touch with banks and other firms across the country.

The bank uses this Teletype set to transfer funds, to call investment firms for securities information, and to notify customers when loan payments are due. They also use it to make hotel, car rental and airline reservations, and to speed the transmittal of correspondence. This service enables the bank to send a written confirmation of any transaction nearly anywhere in a matter of minutes.

#### **HERE'S HOW TO MAKE THE MOST USE OF A REMOTE COMPUTER**

Many companies are finding it more economical to rent time on a large computer located at a data pro-

cessing center than to have a computer of their own. By using Teletype high-speed tape-to-tape equipment to transmit to a remote computer center, they gain all the advantages of having a large computer while paying only for the time they actually use it.

Because this Teletype equipment can be used with most computers, many companies are solving more quickly engineering problems, payroll and complex accounting problems, and even developing the most economical methods of production control and product distribution—all by remote control.

These Teletype units operate on any 5, 6, 7, or 8-level code, including the American Standard Code for Information Interchange. Thus, you can transmit from a remote location to a centralized computer quickly.

In addition, some firms have considered the possibility of sharing their computer installation because of the availability of processing time. For example, a savings bank which uses only five percent of its computer capacity can share the usage of its computer with other banks. A low unit cost of operation can be assured by using Teletype equipment to link the other banks with the computer at the original bank.

#### **HERE'S WHERE TO GO FOR DATA COMMUNICATIONS HELP**

Teletype Corporation has wide experience in the field of data communications. Our applications engineers are available to answer your questions on how Teletype page printers, automatic send-receive sets, paper tape punches and paper tape readers can be used in an effective data communications system to cut your costs while building your profits. You can contact an applications engineer at the general office address listed on the back cover.

This kind of Teletype equipment is made for the Bell System and others who insist on reliable communications at the lowest possible cost.



... your communications link to a remote computer



... order processor, biller, production scheduler—you name it!



... collects and distributes data in time for decisions



... moves paperwork faster to save you money



***machines that make data move***

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## HERE'S HOW TO GET THE DATA YOU NEED IN TIME FOR DECISIONS

Nothing can be as useless to you as information that arrives too late. Wrong decisions are made. Production is slowed. Deliveries are late. Dissatisfied customers are lost. Yet, none of these situations need exist.

Using Teletype machines within a data communications system, enables you to get information where you need it—when you need it. Consequently, you'll be able to make informed, timely decisions that could spell the difference between profit and loss.

The versatility of Teletype equipment in moving information fills all your needs whether it's for occasional transmission of routine messages, or frequent exchange of messages and data between branch offices—or even a steady flow of data within a sophisticated data processing system. The following examples show how Teletype sets are used by management to assure data arrives in time to make the right decisions.

### ELIMINATES LATE REPORTS

A New Jersey food processor had been receiving sales and inventory statistics by mail from its two branch offices. By the time processed reports were available to management, they would be a week old—too late to be used in reaching important decisions.

Teletype ASR (automatic send-receive) sets were installed at all three locations. Now, daily reports are received in minutes at the home office on punched paper tape, and then processed into up-to-date inventory control and sales analysis reports within a day and a half. As a result, inventory costs have been reduced, and the company is able to close its books eight days earlier each month.

### ASSURES RELIABLE TURBINE OPERATION

An electric generating plant uses computers and Teletype

page printers to provide quick and accurate performance information to assure reliable operation and prevent turbine damage. The operator control center of the system has three Teletype printers. One is used to provide periodic logging of variable station operations.

Another serves as an alarm, displaying "off-normal" and "return to normal" conditions. The third Teletype machine is used as a demand point log for digital trending, group review of preselected variables, and turbine startup and information log.

### IMPROVES TRUCK ROUTING

A nationwide trucking firm requires fast, accurate decisions in order to profitably utilize the trucks and men at their six regional offices. They solved the problem through the use of Teletype high-speed tape-to-tape equipment and a computer.

Now, daily progress reports are transmitted over Teletype sets to the home office. The raw data is fed into the computer, and the recommended routing and scheduling is then sent back to the regional offices. This system has helped to cut costs and improve customer service.

### HERE'S HOW YOU ELIMINATE COSTLY ERRORS CAUSED BY DUPLICATE PAPERWORK

How many times have errors in order processing resulted in producing the wrong size or quantity? How many times have prices been misquoted? How many customers have been lost due to incorrect shipments? There are many such examples of how duplicating data from one department to another has led to costly mistakes.

You can do much about these situations with a system that speeds the handling and processing of data by including Teletype communications equipment.

Sales order information can be prepared on Teletype machines, reviewed, and transmitted directly to Teletype receiving sets in other departments. Besides sending each department accurate information, Teletype sets can selectively "edit" this data. Thus, such data as the order number can be sent to all departments, while cost data is directed only to accounting, billing and management departments.

In addition, Teletype ASR sets are equipped with paper tape punches and readers to add even greater speed and accuracy to data handling. Data can be punched off-line to provide errorless tape for transmission at full capacity later. Examples of how Teletype equipment has helped eliminate errors and improve the efficiency of administrative and production control are described below.

#### LINKS 300 OFFICES TOGETHER

A major electrical manufacturer has combined the application of high-speed communications and data processing. Through the use of Teletype machines, two real-time computers at the home office link together the firm's 300 sales offices, plants and warehouses.

At the home office, sales orders are received from the branches by Teletype equipment, and processed through the computers which automatically use the Teletype sets to transmit shipping instructions to the proper warehouses and prepare the customer invoices. This has cut processing time from days to minutes. The computers also keep track of available stock and issue stock replenishment requisitions to the various manufacturing plants when necessary.

With order processing concentrated at the computer center through the use of Teletype equipment, sales and inventory figures are kept up to the second—even though 2,000 orders are received each day. This new system has helped to level out production peaks and

valleys, and to stabilize employment. Other data processing functions performed by this real-time system include auditing and assembly of financial results, origination of payroll checks, control over stock inventories, and generation of statistics on the corporation's sales efforts.

#### CUTS ORDER PROCESSING 75 PERCENT

Getting information where it's needed as quickly as possible helped a metal products manufacturer cut order processing time 75 percent. By using Teletype ASR sets, minutes after an order comes in the data is sent to shipping and production departments—each one receiving the information it needs. The results have been same-day shipment of in-stock items, orders scheduled into production three to seven days faster, overtime reduced, errors greatly reduced, and up-to-date sales reports and analyses provided to management.

#### AIDS CONTROL OF STEEL PRODUCTION

Precision control over steel production on a continuing basis is extremely important. Until recently, one large steel producer relied on an automatic handwriting machine and a voice paging system to transmit lab tests results on the compositions of steel to production control centers throughout the plant.

This previous method has been replaced by a computer tied in with Teletype page printers. In the new system, pneumatic tubes transport steel samples to the laboratory where a computer-controlled analysis is made to determine the precise amount of steel ingredients within the mixture. Using a Teletype machine, the findings are transmitted to Teletype receiving sets at ten key production control centers within the plant. Production supervisors are now able to operate with the knowledge that the latest, most accurate information is available to produce quality steel.



## HERE'S HOW TO MAKE INVENTORY MOVE FASTER

Though you have both efficient administrative and production facilities, your profits can still be eaten up by high inventory and distribution costs. Some firms are faced with inventory and delivery costs that equal or exceed all other cost factors. Many justify a high inventory on the grounds it's needed to meet fluctuating customer demands.

Yet, other companies have cut down inventory costs while keeping a larger selection of stock on hand. These firms have learned that an effective data communications system can solve many inventory and distribution problems.

How? By using Teletype punched paper tape equipment, page printers, and automatic send-receive sets to link business machines with existing channels of communications. This results in instant, accurate communications that enables companies to handle a larger volume of business faster with more efficiency and less error. How you can take advantage of this same efficiency can best be answered by the following detailed examples.

### MOVES CRITICAL PRODUCTS RAPIDLY

A national drug manufacturer receives daily requests from its 26 branches in the U.S. and Canada for its radioactive pharmaceuticals. Due to their rapid decay, these critical products can't be kept in stock.

As a result, this firm has installed Teletype machines at all offices to provide the necessary speed, efficiency, and written verification required to plan production and delivery. Now, orders are instantly received by a Teletype set and prepared, packaged and shipped almost immediately. Thus, this drug company is able to handle urgent requests in the shortest possible time.

### EFFICIENT PROCESSING OF FREIGHT BILLS

A western trucking firm improved its entire operation

with a data communications system that incorporates Teletype ASR (automatic send-receive) sets and high-speed tape-to-tape equipment.

With this new system, drivers no longer have to wait for bills to be rated and completed, but can move out as soon as their trucks are loaded. Billing information is punched on paper tape off-line using Teletype ASR sets and later transmitted to the destination terminal. When freight must be transferred to other trucks at intermediate terminals, transmission of bills to these points enables terminal personnel to prepare for incoming loads. Copies of freight bills are also sent to accounting and record offices.

By integrating Teletype ASR sets at terminals having low volume with high-speed tape-to-tape sets at heavy traffic terminals, this firm provides fast and efficient processing of freight bills.

### KEEPS INVENTORY COSTS DOWN

Having 800 nationwide redemption centers, a large premium company was faced with the problem of trying to keep a large inventory to satisfy demand, but still keep costs down to an efficient minimum. They solved the problem through the use of a sophisticated warehousing procedure combined with data processing and communications equipment including Teletype high-speed tape-to-tape sets. Here's how it works.

Each week redemption center managers transmit merchandise reports (covering as many as 1,600 items) to their regional warehouses over Teletype high-speed tape-to-tape sets at 1,050 wpm. Then, the warehouse forwards this inventory information to New York where it is fed into a computer.

The computer analyzes the inventory on hand in each warehouse, takes into consideration stock history of each redemption center, seasonal demands and possible obsolescence. Next, it prints out how much the warehouses should ship to each redemption center.